## **United States of America**

## DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

WRC-03 Agenda Item 1.12a: to consider allocations and regulatory issues related to the space science services in accordance with Resolution 723 (Rev. WRC-2000);

**Background Information**: ITU-R Recommendation **SA.363-5** recommends that frequencies below 1 GHz are technically suitable for telecommand of satellites in the space science services operating below an altitude of 2000 km. A deficiency in telecommand (uplink) frequency allocations has been previously identified, compared to the available telemetry (downlink) allocations in the 100 MHz to 1 GHz range. The deficiency was first noted in Resolution **712** (**WARC-92**), repeated in Resolution **712** (**Rev. WRC-95**), and again in Resolution **723** (**WRC-97**).

This item was originally placed on the WRC-97 agenda. WRC-97 determined that insufficient study had been completed to take action on this agenda item.

Since WRC-2000, additional studies have been undertaken in the ITU-R. The study results show that show that separation distances for aeronautical mobile stations must be over 400 km and for MSS approximately 100 km. These required coordination distances make use of RR **9.17/17a** and Appendix **7** impractical and will result in large geographical regions where existing Aeronautical Mobile, MS, FS, and MSS services are unusable.

## **Proposal**:

## USA//1 NOC

Allocation to services		
Region 1	Region 2	Region 3
	220-225	
223-230	AMATEUR	223-230
BROADCASTING	FIXED	FIXED
Fixed	MOBILE	MOBILE
Mobile	Radiolocation 5.241	BROADCASTING
	225-235	AERONAUTICAL
	FIXED	RADIONAVIGATION
	MOBILE	Radiolocation
5.243 5.246 5.247		5.250
230-235		230-235
FIXED		FIXED
MOBILE		MOBILE
		AERONAUTICAL
		RADIONAVIGATION
5.247 5.251 5.252		5.250

235-267	FIXED	
	MOBILE	
	5.111 5.199 5.252 5.254 5.256	
267-272	FIXED	
	MOBILE	
	Space operation (space-to-Earth)	
	5.254 5.257	
272-273	SPACE OPERATION (space-to-Earth)	
	FIXED	
	MOBILE	
	5.254	
273-312	FIXED	
	MOBILE	
	5.254	
312-315	FIXED	
	MOBILE	
	Mobile-satellite (Earth-to-space) 5.254 5.255	
315-322	FIXED	
	MOBILE	
	5.254	
322-328.6	FIXED	
	MOBILE	
	RADIO ASTRONOMY	
	5.149	
328.6-335.4	AERONAUTICAL RADIONAVIGATION	
	5.258 5.259	
335.4-387	FIXED	
	MOBILE	
	5.254	
387-390	FIXED	
	MOBILE	
	Mobile-satellite (space-to-Earth) 5.208A 5.254 5.255	
390-399.9	FIXED	
	MOBILE	
	5.254	
399.9-400.05	MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A	
	RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260	
	5.220	

**Reasons**: ITU-R studies have shown that sharing between telecommand and existing services in the 225-400 MHz band results in impractical coordination requirements with existing services.